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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,607	12/27/2000	William Williams	CSCO-96941	1311

7590 07/23/2003  
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EXAMINER

NGUYEN, CINDY

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 07/23/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

PR4

# Office Action Summary

Application No.

09/752,607

Applicant(s)

WILLIAMS, WILLIAM

Examiner

Cindy Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 10 February 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

This is in response to amendment filed 06/19/03.

### **1. Continued Examination Under 37 CFR 1.114**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/19/03 has been entered.

### **2. Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

### **3. Claims 1, 2, 7, 12, 14, 15, 20 and 21 rejected under 35 U.S.C. 102(e) as being anticipated by Beier et al. (U.S 6065018) (Beier).**

Regarding claims 1, 12, 14 and 20, Beier disclose: a system and method and a computer-readable medium and an apparatus of archiving a database, comprising the steps of: storing a plurality of archive logs (col. 5, lines 21-25, Beier) comprising a plurality of transactions (col. 5, lines 61 to col. 6, lines 11, Beier) on an operational database (106, fig. 1 and corresponding text, Beier);

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transmitting a plurality of asynchronous streams to a backup database (col. 8, lines 51-63, Beier), wherein the asynchronous streams correspond to a plurality of the archive logs (col. 10, lines 53-63, Beier);

Updating the backup database with the plurality of transactions (col. 5, lines 61 to col. 6, lines 11, Beier).

In addition, Beier disclose: a memory for storing instructions on how data is to be transferred from the operational database to the backup database (130, fig. 1 and corresponding text, Beier).

Regarding claims 2, 15 and 21, all the limitations of these claims have been noted in the rejection of claims 1, 14 and 20, respectively. In addition, Beier disclose: wherein the plurality of asynchronous streams are transmitted simultaneously (col. 8, lines 51-63, Beier).

Regarding claim 7, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Beier disclose: further comprising the step of constructing an array of the plurality of archive logs which are to be transferred from the operational database to the backup database (col. col. 8, lines 51-63, Beier).

**4. Claims 8, 9, 17, 18, 23 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohran (U.S 6085298).**

Regarding claims 8, 17 and 23, Ohran disclose: A method and an apparatus of performing automatic recoveries on an archived database, comprising the steps of:

comparing files residing on An operational database to files residing on a backup

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database (col. 29, lines 26-40, Ohran);

determining whether there are any missing files by checking for files which exist on the operational database and which do not exist on the backup database (col. 30, lines 15-38, Ohran);

determining whether there are any corrupted files by checking for files which have a different size on the operational database as compared to corresponding file residing on the backup device (col. 30, lines 30-35, Ohran);

recopying files from the operational database to the backup database which have become corrupted, wherein the automatic recovery process is run by a program without human intervention (col. 30, lines 30-35, Ohran);

recopying files from the operational database over to the backup database which are missing (col. 30, lines 30-35, Ohran).

Regarding claims 9, 18 and 24, all the limitations of these claims have been noted in the rejection of claims 8, 17 and 23, respectively. In addition, Ohran disclose: further comprising the step of transferring a plurality of files simultaneously from the host device to the backup device (col. 20, lines 20-37, Ohran).

### **5. Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**6. Claim 3, 4, 6, 13, 16, 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beier et al. (U.S 6065018) (Beier) in view of Ohran (U.S 6085298).**

Regarding claims 3, 13, 16 and 22, all the limitations of these claims have been noted in the rejection of claims 1, 12, 14 and 21, respectively. However, Beier didn't disclose: further comprising the steps of: comparing a plurality of files corresponding to the backup database to a plurality of files of the operational database to determine whether there are any corrupt or missing files. On the other hand, Ohran discloses: further comprising the steps of comparing a plurality of files corresponding to the backup database to a plurality of files of the operational database to determine whether there are any corrupt or missing files (col. 30, lines 15-38, Ohran); automatically transferring files from the operational database to the backup database which have been corrupted or deleted (col. 30, lines 30-35, Ohran). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the steps of: comparing a plurality of files corresponding to the backup database to a plurality of files of the operational database to determine whether there are any corrupt or missing files and

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transferring files from the operational database to the backup database which have been corrupted or deleted in the system of Beier as taught by Ohran. The motivation being to enable the system to retransfer the data missing when transfer to backup database and avoid losing information when backup and recovery data in the file system when corrupt data occur by system crash.

Regarding claim 4, all the limitations of this claim have been noted in the rejection of claim 1. However, Beier didn't disclose: further comprising the step of transmitting a predetermined number of streams in parallel, wherein the number is set by a user in a config file. On the other hand, Browne disclose: further comprising the step of transmitting a predetermined number of streams in parallel (col. 20, lines 20-37, Ohran), wherein the number is set by a user in a config file (col. 11, lines 8-16, Browne). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include step of transmitting the number of streams in parallel by a user in a config file in the system of Beier as taught by Ohran. The motivation being enable the user to transmit many files in the file system faster and avoid corrupt data by system crash.

Regarding claim 6, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Beier/Ohran disclose: further comprising the step of running streaming rsynchs for copying data from the operational database to the backup database (col. 5, lines 44-62, Ohran). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include step of running streaming rsynchs for copying data from the operational database to the backup database in the system of Beier as taught by Ohran. The

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motivation being enable the user to transmit many files in the file system faster and avoid corrupt data by system crash.

Regarding claims 10 and 19, all the limitations of these claims have been noted in the rejection of claims 9 and 17, respectively. In addition, Beier/Ohran disclose: wherein the plurality of files are streamed according to an rsync command (col. 7, lines 1-19, Beier).

**7. Claim 5 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Beier et al. (U.S. 6065018) (Beier) in view of Nielsen (5812398).**

Regarding claim 5, all the limitations of this claim have been noted in the rejection of claim 1. However, Beier didn't disclose: wherein the transmitting step runs in cron. On the other hand, Nielsen discloses: wherein the transmitting step runs in cron (col. 7, line 14 to col. 8, lines 11, Nielsen). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the transmitting step runs in cron in the system of Beier as taught by Nielsen. The motivation being to enable the user to maintain the system which indicates that the backup routine should be run at specified intervals.

**8. Claim 11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ohran (U.S. 6085298) in view of Nielsen (5812398).**

Regarding claim 11, all the limitations of this claim have been noted in the rejection of claim 8. However, Belsan/Brownse didn't disclose: wherein the comparing step comprises the step of performing a rolling checksum. On the other hand, wherein the comparing step comprises



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the step of performing a rolling checksum (col. 34, line 65 to col. 35, line 15, Nielsen). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the step of checksum in the combination system of Belsan/Brownse as taught by Nielsen. The motivation being to enable the user to transmit data in the file system faster and avoid corrupt data by system crash.

**1. Response to Arguments (filed 06/19/03)**

Applicant's arguments have been considered, but are moot in view of the new ground(s) of rejection.

**2. Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 703-305-4698. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CN

Cindy Nguyen  
July 15, 2003

  
FRANTZ COBY  
PRIMARY EXAMINER